

**REMARKS**

**I. INTRODUCTION**

Claims 17 and 19-21 have been amended. Claims 17-21 remain under consideration in the present application. Provided above, please find a claim listing indicating the claim amendments and current status of the claims on separate sheets so as to comply with the requirements set forth in 37 C.F.R. § 1.121. It is respectfully submitted that no new matter has been added.

**II. OBJECTIONS TO CLAIMS SHOULD BE WITHDRAWN**

The Examiner objects to claims 17-21 because of minor informalities. Specifically, the Examiner states that claim 20 has two “third” arrangements, and that generally, the claims contain “corresponded” and not “corresponding.” As the Examiner shall ascertain, claims 17 and 19-21 have been amended to address such informalities.

In view of the above, Applicants respectfully request that the objections to the claims be withdrawn.

**III. REJECTION UNDER 35 U.S.C. § 112 SHOULD BE WITHDRAWN**

Claims 20 and 21 stand rejected under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite.

Specifically, the Examiner alleges that claim 20 is indefinite because it recites “a third arrangement configured to transmit the material name and the property item to the server-side computing arrangement having at least one of the addresses corresponded

to the material name and the property item inputted from the first arrangement”, but that claim 20 does not relate which elements are contemplated by “at least one of.”

However, amended independent claim 20 clearly recites a second arrangement configured to store addresses of the server-side computing arrangement corresponding to the material name and the material model identification number. Therefore, the third arrangement is configured to transmit the material name and the material model identification number to the server-side computing arrangement having at least one of the addresses corresponding to the material name and the material model identification number. Accordingly, Applicants respectfully submit that claim 20 is not indefinite.

Further, the Examiner alleges that claim 21 is indefinite because the phrase “transmitting the extracted material property data to the user-side computing arrangement so as to be available to *a numerical invisible to a user* at the server-side computing arrangement” is unclear. As the Examiner shall ascertain, claim 21 has been amended to address such minor issue.

Accordingly, based on the arguments as set forth herein above, Applicants respectfully request that the 35 U.S.C. § 112, second paragraph rejection of claims 20 and 21 be withdrawn.

#### **IV. REJECTIONS UNDER 35 U.S.C. § 103(a) SHOULD BE WITHDRAWN**

Claims 17, 20 and 21 stand rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent No. 6,813,749 issued to Rassaian et al. (hereinafter “Rassaian”), in view of U.S. Patent No. 6,246,410 issued to Bergeron et al. (hereinafter “Bergeron”). Claims 18 and 19 stand rejected under 35 U.S.C. §103(a) as being

allegedly unpatentable over Rassaian in view of Bergeron, and further in view of U.S. Patent No. 6,330,670 issued to England et al. (hereinafter “England”).

Applicants respectfully assert that the combination of Rassaian and Bergeron, taken individually or in combination with England, fails to teach or suggest the subject matter recited in amended independent claims 17 and 19-21, and the claims which depend from claim 17, for at least the reasons provided herein below.

“To reject claims in an application under Section 103, an examiner must show an un rebutted *prima facie* case of obviousness.” *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1455 (Fed. Cir. 1998). The Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated:

Under Section 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

Indeed, to sustain a rejection under 35 U.S.C. § 103(a), there must be some teaching, other than the instant application, to alter the prior art to arrive at the claimed invention. “The problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem.” *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 679 (Fed. Cir. 1998).

The objective standard for determining obviousness under 35 U.S.C. § 103, as set forth in *Graham v. John Deere, Co.*, 383 U.S. 1 (1966), requires a factual determination to ascertain: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; and (3) the differences between the claimed subject matter and the prior art. Based on these factual inquiries, it must then be determined, as a matter

of law, whether or not the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the alleged invention was made. *Graham*, 383 U.S. at 17. Courts have held that there must be some suggestion, motivation or teaching of the desirability of making the combination claimed by the applicant (the “TSM test”). See *In re Beattie*, 974 F.2d 1309, 1311-12 (Fed. Cir. 1992). This suggestion or motivation may be derived from the prior art itself, including references or disclosures that are known to be of special interest or importance in the field, or from the nature of the problem to be solved. *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996).

Although the Supreme Court criticized the Federal Circuit’s application of the TSM test, see *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, (2007) the Court also indicated that the TSM test is not inconsistent with the *Graham* analysis recited in the *Graham v. John Deere* decision. *Id.*; see *In re Translogic Technology, Inc.*, No. 2006-1192, 2007 U.S. App. LEXIS 23969, \*21 (October 12, 2007). Further, the Court underscored that “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR*, 127 S. Ct. at 1741. Under the precedent established in *KSR*, however, the presence or absence of a teaching, suggestion, or motivation to make the claimed invention is merely one factor that may be weighed during the obviousness determination. *Id.* Accordingly, the TSM test should be applied from the perspective of a person of ordinary skill in the art and not the patentee, but that person is creative and not an automaton, constrained by a rigid framework. *Id.* at 1742.

However, “the reference[s] must be viewed without the benefit of hindsight afforded to the disclosure.” *In re Paulsen*, 30 F.3d 1475, 1482 (Fed. Cir. 1994).

The prior art cited in an obviousness determination should create a reasonable expectation, but not an absolute prediction, of success in producing the claimed invention. *In re O’Farrell*, 853 F.2d. 894, 903-04 (Fed. Cir. 1988). Both the suggestion and the expectation of success must be in the prior art, not in applicant’s disclosure. *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 927 F.2d 1200, 1207 (Fed. Cir. 1991) (citing *In re Dow Chem. Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988)). Further, the implicit and inherent teachings of a prior art reference may be considered under a Section 103 analysis. See *In re Napier*, 55 F.3d 610, 613 (Fed. Cir. 1995).

Secondary considerations such as commercial success, long-felt but unsolved needs, failure of others, and unexpected results, if present, can also be considered. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538-39 (Fed. Cir. 1983). Although these factors can be considered, they do not control the obviousness conclusion. *Newell Cos. v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988).

To establish obviousness, the prior art references must be evaluated as a whole for what they fairly teach and neither the references’ general nor specific teachings may be ignored. *Application of Lundsford*, 357 F.2d. 385, 389-90 (CCPA 1966). A reference must be considered for all that it teaches, not just what purportedly points toward the invention but also that which teaches away from the invention. *Ashland Oil, Inc. v. Delta Resins & Refractories*, 776 F.2d. 281, 296 (Fed. Cir. 1985).

Amended independent claims 17 and 19-21 recite, *inter alia*, an arrangement configured to input, store or transmit a material model identification number identifying

at least one of a type of material property data, a type of material model, a name of an analysis program or a version thereof. Such subject matter is clearly described in the specification. (See, e.g., paragraph [0034] of the published application).

Rassaian, on the other hand, describes a method, system and computer program product that provide an economical and timely design analysis for components that enables users to determine the appropriate design for the components based upon the type of thermo-mechanical environment(s) to which the component will be subjected over its lifetime. (See Rassaian, Abstract). However, Rassaian, taken individually or in combination with Bergeron, does not teach or suggest any material model identification number, much less a material model identification number that identifies at least one of a type of material property data, a type of material model, a name of an analysis program or a version thereof, as clearly recited in amended independent claims 17 and 19-21.

Moreover, the publications of Rassaian and Bergeron, taken individually or in combination with each other, does not teach or suggest inputting a material model identification number, as clearly recited in amended independent claims 17, 20 and 21. Such description is clearly provided in the specification. (See, e.g., paragraphs [0031]-[0035] of the published application of the present disclosure).

Amended independent claims 17 and 19-21 provide a numerical analysis that can be performed by designating only a material name and its material model identification number by a user so that the user does not have to concern himself with the substance of the material property data.

England does not cure the deficiencies of the combination of Rassaian and Bergeron, and the Examiner does not contend that it does.

Further, amended independent claims 17 and 19-21 also recite that, *inter alia*, the material name and the material model identification number correspond to the material property data from (a) the mechanical property value, (b) the thermal physical property value, or (c) the electromagnetic property value. The combination of Rassaian and Bergeron, taken individually or in combination with England, does not teach or suggest this recited feature, and the Examiner does not contend that it does.

Finally, each of amended independent claims 17, 19 and 21 recites an arrangement to extract (see claims 17 and 19) or extracting (see claim 21) one or more types of the material property data from (a) the mechanical property value, (b) the thermal physical property value, or (c) the electromagnetic property value corresponding to the material name and the material model identification number. Amended independent claim 20 recites an arrangement configured to receive the material property data from (a) the mechanical property value, (b) the thermal physical property value, or (c) the electromagnetic property value corresponding to the material name and the material model identification number that are extracted from a material property data storage arrangement based on the material name and the material model identification number.

The Examiner agrees that Rassaian does not describe this recitation of the claims, but alleges that Bergeron describes such recited subject matter to purportedly cure such deficiency. (See Office Action dated May 26, 2009, at pp. 4-6). However, Bergeron, in col. 9, line 10 (as pointed out by the Examiner), describes that "data palette

1 is used to ***display*** information content of the rows of a result set." (**Emphasis added**). Indeed, Bergeron certainly **does not** describe the recited extraction as provided in each independent claim of the present application. Certainly, the display of information as indicated in Bergeron does not describe any *extraction*, much less any extraction of material property data, as clearly recited in amended independent claims 17 and 19-21. The England reference does not cure at least this deficiency, and the Examiner does not contend that it does.

Regarding the 35 U.S.C. § 103(a) rejection of claim 18, Applicant respectfully asserts that Bergeron and Rassaian, taken individually or in combination with England, fails to teach or suggest the explicit recitations of amended independent claim 17. Accordingly, claim 18, which depends from amended independent claim 17, is also patentable over the prior art relied upon by the Examiner at least because these publications fail to teach or suggest the recited features of amended independent claim 17.

Therefore, for at least the reasons as presented herein above, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 17, 20 and 21 as being allegedly unpatentable over Rassaian in view of Bergeron, and withdrawal of the 35 U.S.C. § 103(a) rejection of claims 18 and 19 as being allegedly unpatentable over Rassaian in view of Bergeron, and further in view of England.



V. CONCLUSION

In light of the foregoing, Applicants respectfully submit that claims 17-21 are in condition for allowance. Prompt consideration, reconsideration and allowance of the present application are therefore earnestly solicited. If any issues remain outstanding, the Examiner is invited to contact the undersigned via the telephone number provided below.

Respectfully submitted,

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